Activities in the Northern Management Area

GFNMS and MBNMS Joint Sanctuary Advisory Council Meeting
August 21, 2013
Interpretive Signs

Along San Mateo Coast and Marin Headlands
Fitzgerald Marine Reserve

- Interpretive Stairway & Trail
- 2 Docent Training Classes
Pillar Point Harbor
Maritime Trail
Pigeon Point Lighthouse
Abalone Soirée’

at Mavericks Event Center

ABALONE SOIRÉE!
Saturday, March 23rd, 7 - 9 PM
ART & SCIENCE RECEPTION & LECTURE

Gastropod meets gastronomy at our “ab-solutely fabulous” Abalone Soiree at the Mavericks Event Center overlooking Pillar Point Harbor, Half Moon Bay.

RECEPTION ACTIVITIES
• Savor a dainty bite of freshly prepared abalone
• Meet abalone farmers, scientists, and enthusiasts
• Enjoy abalone art
• Sample local beers & wines at our no-host bar
• Close the evening on the “Abba only” dance floor

LECTURE: ABALONE’S RISE TO CULINARY FAME
TIM THOMAS, FISHERIES HISTORIAN
Delve into the fascinating history of Monterey’s abalone industry. Learn how a German restaurateur, “Pop” Ernest DeOetter made the abalone famous and how Japanese immigrants risked their lives diving for this amazing mollusk.
Tim Thomas, fourth generation native of the area, is a fisheries historian who has researched and lectured extensively on local fishing communities.

TICKETS REQUIRED:
Cost $15
Mavericks Event Center, 107 Broadway, Half Moon Bay
Space is limited.
Contact Justin Hall at:
(415) 561-6626 x308 or justin.hall@noaa.gov

www.farallones.org
At Your School Programs

735 students served in 2013 on San Mateo Coast

- K-3 Crab Cab
- 3-5 Seabird Shuttle
- 4-6 Sharkmobile
- 5-7 Fishermen in the Classroom
- 7-12 Ocean Acidification
- Assembly Program
Key Aspects of LiMPETS

LiMPETS is well established
• Spans 600 miles of coastline
• 26 rocky intertidal sites and 37 sandy beach sites

LiMPETS is successful
• Engage 5,000 students in collecting data

LiMPETS is a model citizen science program
• Data informing MLPA baseline
Rocky Shore Partnership
A Citizen Naturalist & Scientist Program with California Academy of Sciences

San Mateo County

- Volunteers monitor invertebrates and seaweed in the intertidal areas at Pillar Point
- Volunteers talk with and educate visitors on intertidal life and tidepool etiquette
Rocky Shore Partnership
A Citizen Naturalist & Scientist Program with California Academy of Sciences

San Mateo County

Future plans

• Implement MPA Watch in partnership the Ocean Science Trust and San Mateo MPA Collaborative

• Expand surveys to Fitzgerald Marine Reserve

• Expand work with LiMPETS
ACCESS: Applied California Current Ecosystem Surveys

- Partnership between Point Blue, CBNMS, GFNMS, FMSA, University of Hawaii, SFSU, BML

- Collects integrated data to model biological hotspots and resources at risk

- Transect lines 5-10 are within MBNMS

- Project associated with Whale Aware to gather near “real time” data on whales at risk in MBNMS, GFNMS, CBNMS, CINMS
Oceanographic conditions determine strength and influences of upwelling

Zooplankton to model hotspots

Chemical properties of water column to determine ocean acidification

Seabird and marine mammal abundance, distribution and behavior to model persistent foraging areas

Vessel activities to model resources at risk

Miscellaneous: debris, drift algae, etc.

ACCESS: Applied California Current Ecosystem Surveys
ACCESS: Applied California Current Ecosystem Surveys

- Example of resources at risk from ship strikes
- ACCESS surveys provide overview of foraging areas and identify concentrations of whales
- May, July and September surveys produce sightings maps to justify listing in Local Notice to Mariners
- Advisories to announce beginning of blue and humpback whale season and request to slow to 10 kts to lessen lethality from ship strikes
Central & Northern CA Harbor Seal Census

- Census occurs throughout the pupping, breeding and molting seasons, March – July, Sea Ranch south through San Mateo Co.
- Census is performed in partnership with 9 other organizations
- Sampling design enables the data to be integrated with other regional surveys for a regional census
Central & Northern CA Harbor Seal Census

- GFNMS and FMSA staff and volunteers perform counts at San Mateo Co breeding and haul-outs
- Regional census provides data on population, location of haul-outs and breeding areas, on-set of breeding and seasonality of pupping
Central & Northern CA Harbor Seal Census

- Regional census provides guidance to sanctuary management, resource protection and permitting actions when and where certain activities can safely take place with minimal or no disturbance.

Beach Watch

- Citizen-science monitoring

- Dead bird and mammal data provide annual, seasonal, and geographic trends in mortality rates including trends in age, sex, and cause of death, indicating the health of the shoreline habitat

- Live bird and mammal data provide baseline rates on seasonal, annual, and geographic trends and indices and resources at risk from coastal human activities such as oil spills, vessel groundings, and disturbance
Oil and tarball data provide information on the location, amount, source and trends of oil pollution.

Beached birds, oiled birds and tarballs are deposited at different locations due to bottom topography, prevailing surface currents, locations of vessel traffic lanes and nearby colonies.

This information is used for planning restoration, over $52M resulted from BW NRDA.
Beach Watch

- Data are available by season, region, management unit, and each beach.

- Abundance and distribution of beach wrack provide location and seasonal trends of this important shoreline, biogenic (living structural) habitat.

- Beach profiles provide information on the seasonal and tidal range of the openings of lagoons and streams and long-term trends in beach erosion and deposition patterns.
Beach Watch – Management Uses

- Wildlife Protection Area Designations
- Bird and mammal mortality events
- Natural resource damage assessment
- Effects of mariculture industry
- Wildlife entanglement
- Waste management practices
- Listed species monitoring
Beach Watch – Response, NRDA & Restoration

- Beach Watch provides historic baseline deposition rates
- Early detection and reporting
- Network of experienced wildlife reconnaissance surveyors who can respond quickly in oil events
- Documentation of impacts on outer beaches, wildlife and human use
- Collection of tarballs and oiled feather samples as evidence
GFNMS Emergency Response Plan and online Portfolio
• Includes Northern Mgmt Area
• Specifies protocols / response actions for spills within NMA in coordination with MBNMS staff

Regular participation in ACP Mtgs and drills

Regular participation in Abandoned Vessels Workgroup Meetings
Vessel Groundings

Respond regularly to vessel groundings within NMA

- In CY 2012, 3 out of 8 groundings within NMA
- In CY 2013 (thus far) 3 out of 3 groundings within NMA

Incidents within NMA often require significant staff time given high interest from the community

Working with Pillar Point Harbor District, USCG, SLC, and state legislature on addressing boat groundings
Recommendations Apply to Northern Management Area

- TSS changes
- Whale Sighting Network
- Commercial Mariner Outreach
Permitting

Mavericks Surf Contest
- Annual permitting
- Enforcement coordination with OLE, CDFW and USCG
- GFNMS staff participation during event (wildlife disturbances, MPWC usage)

White Shark Research
- TOPP Program White Shark Research (Ano Nuevo)
- Programmatic Environmental Assessment

Ongoing permitted research at Fitzgerald Marine Reserve
Ocean Climate Initiative

Goal
Address local climate change impacts through fostering awareness, advocating solutions, and promoting action to build ecosystem resilience and sustainability.

Objectives
- Coordinate across GFNMS program areas to integrate climate into the work we do.
- Coordinate partnerships to address climate change impacts to sanctuary resources.
- Work within and outside of NOAA to form an alliance to share resources and knowledge in the Bay Area.
OCI: Climate Smart Conservation

- **Green Operations: Reducing Our Carbon Footprint**
  WG developed over 130 strategies, annual emissions audits:
  [http://farallones.noaa.gov/about/facilities.html](http://farallones.noaa.gov/about/facilities.html)

- **Research and Monitoring**
  WG developing Ocean Climate Indicators Monitoring Inventory and Plan by Fall 2013:
  [http://farallones.noaa.gov/manage/climate/indicators.html](http://farallones.noaa.gov/manage/climate/indicators.html)

- **Climate Smart Adaptation**
  Currently developing 2 year project plan. Targeting kick off with focal resources workshop in Winter 2013.

- **Communication**
  Initiating Fall/Winter 2013 with GFNMS education team.
Our Coast–Our Future

- Online decision support tools for SLR and storms with 40 different scenario combinations in mapping tool.
- Currently available from Half Moon Bay to Bodega Head, will also cover SF Bay by Aug 2014.
Seabird Protection Network

Funding
- Command & Luckenbach
- NOAA Restoration Center

Established 2005

3 Project Components
- Monitoring
- Enforcement & Management Actions
- Outreach

Bodega Head to Point Sur
Bodega Head – Pt. Sur
est. 2005
Funded by Luckenbach oil spill mitigation
Seabird Protection Network

Cities Adjacent to the Northern Management Area Where SPN Conducts Business

- Capitola
- Daly City
- Fremont
- Half Moon Bay
- Hayward
- Hollister
- Marina
- Millbrae
- Monterey
- Moss Beach
- Moss Landing
- Pacific Grove
- Palo Alto
- San Carlos
- San Jose
- San Martin
- San Mateo
- Santa Cruz
- Seaside
- Sunnyvale
- Watsonville
Seabird Protection Network

Annual mailings: 407 – pilots; 720 boaters

MPA Collaborative Implementation Project
- Pillar Point Harbor signage

Aerial Patrol Surveys – USCG Air Auxiliary

Water bird Disturbance Symposium
- Pilot & kayak businesses from NMA

Number of Individuals Reached through Presentations Conducted in Northern Management Area, 2007 – 2013

- 435 boaters
- 38 general
- 96 kayaker
- 40 pilot
Seabird Protection Network
Thank You!

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